



LOCTITE® EQUIPMENT

OPERATION MANUAL

Hysol® 175-SPRAY

P/N 98037

Hysol® 175-SPRAY-HT

P/N 98041



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1. Please Observe the Following

1.1. Safety



Do not touch the nozzle or molten adhesive with bare skin as they are hot - the operating temperature of the Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT applicators is approximately 400°F (200°C). Protective gloves should always be worn. Careless handling can cause skin burns. If molten adhesive comes into contact with the skin immerse the affected area immediately in plenty of cold water. Seek medical advice if necessary.

In addition to the safety instructions herein, any statutory regulations, local fire insurance regulations, or other generally valid "regulations for accident prevention" must be complied with when using this tool.

- Never use the tool if it is damaged in any way.
- Do not use this tool in damp rooms, outdoors while it is raining, or where there is high humidity.
- Do not use this tool in the vicinity of any heat-sensitive materials, or any flammable materials, liquids, or gases.
- Only use extension cables that meet the specification shown in "Technical data".
- Never pull on the tool's connecting cable.

1.2. Items supplied

Loctite® Hysol® 175-SPRAY

Pneumatically-driven Hot Melt Cartridge Spray Dispenser, fitted with 356°F (180°C) thermostat (suitable for standard spray hotmelt adhesives)

Valve body airline adaptor

Plastic Stand

Manual

Loctite® Hysol® 175-SPRAY-HT

Pneumatically-driven Hot Melt Cartridge Spray Dispenser, fitted with 383°F (195°C) thermostat (suitable for polyamide spray hotmelt adhesives)

Valve body airline adaptor

Plastic Stand

Manual

2. Description

The Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT are the highest output, hand-held industrial spray hotmelt applicators available. With its two powerful 250W stainless steel cartridge heaters, they are capable of dispensing up to 9 lbs. of molten hotmelt per hour, yet only take 10 minutes to warm up from cold.

Supported by a range of spray adhesive formulations, the Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT are suitable for most applications - they can even be used with heat sensitive substrates such as expanded polystyrene and other plastic foams. Also, the Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT system are solvent-free and non-toxic, so there are none of the environmental problems often associated with other spray adhesive applicators.

Designed to comply with world wide safety standards, the Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT also feature a totally enclosed heater housing, and are fitted with thermal fuse protection.

3. Technical Data

Dimensions (L x H x W):	approx. 11 13/16" x 9 15/32" x 2 17/32" (Approx. 300 x 240 x 65 mm)
Total weight:	approx. 3 lbs. (1.4 Kg)
Connection cable with mains plug:	10 ft (3 m) long
Operating voltage:	110-120 VAC 50/60Hz
Power consumption	500W
Heating up time:	10 minutes
Operating temperature:	175-SPRAY approx. 356°F (180°C) 175-SPRAY-HT approx. 383°F (195°C)
Diameter of adhesive inlet:	1 11/16" (43 mm)
Extension cable:	max. 65ft (20 m) long
Wire cross section:	at least 16 a.w.g. (1.5 mm ²)
Air Supply / Pneumatic	Minimum - 45 p.s.i. (3 bar) Maximum - 100 p.s.i. (7 bar)

Approximate Spray Pattern	Minimum	Maximum
Ultra Wide Spray Pattern / 985216	1 1/2" [38mm]	6" [150mm]
Wide Spray Nozzle Assembly / 985122	1 1/4" [32mm]	5" [127mm]
Narrow Spray Pattern Assembly / 985211	1/2" [13mm]	1 1/4" [32mm]

4. Installation

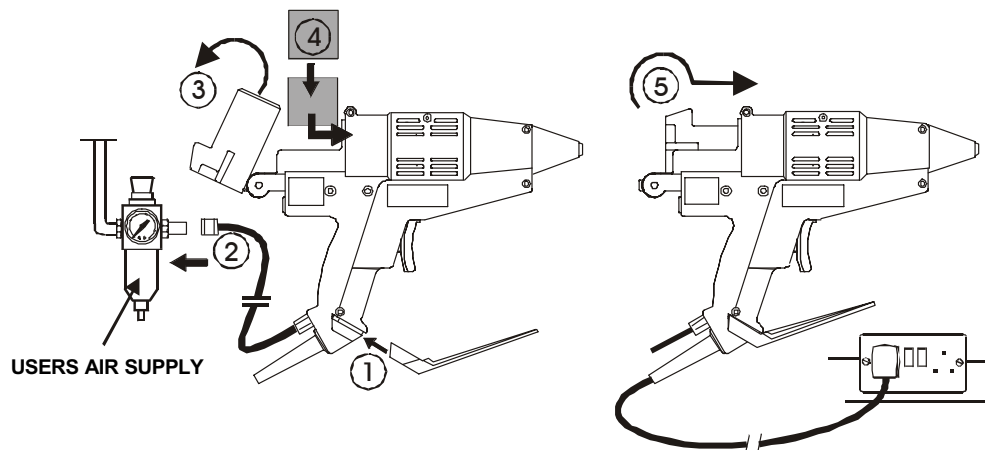


Before using the tool for the first time check it carefully for signs of external damage. If any transit damage is found DO NOT USE THE TOOL - return it to your supplier immediately.

Steps 1 – 5 should be followed before connection to the mains supply:



1. Insert the applicator stand into the grooves at the base of the handle. Stand applicator on a flat surface.
2. Connect the air supply hose to a clean, dry and regulated air supply using the Quick-Disconnect fitting provided (use of a filter/regulator is recommended)
3. Pull piston back fully and rotate upwards.
4. Load two adhesive cartridges into the barrel of the tool and push fully forward.
5. Rotate the piston down and slide forward fully until it contacts the rear of the adhesive cartridge - it should engage about 5/16" (6-8mm) into the applicator barrel.



6. Connect tool to mains supply.
7. Red 'Power On' indicator light illuminates.

8. Allow the applicator to thoroughly warm up for 10 minutes. Do not attempt to operate the applicator until this time has elapsed.

5. Operation

Normal use:

- Fit the stand and place the applicator in an upright position on a flat surface.
- Plug the applicator into the power supply socket, and switch on the power. Wait 10 minutes for the applicator to reach its normal operating temperature.
- Squeeze the trigger to advance the piston and extrude molten adhesive through the nozzle.
- To stop extruding adhesive simply release the trigger.



During use, the piston will advance into the barrel as the trigger is pulled. A point will be reached where the piston no longer advances, and the sound of air escaping can be heard - this indicates that the applicator needs reloading.

- Release the trigger.
- Pull the piston back.
- Insert a new adhesive cartridge.
- Operate the tool normally.

5.1. Applying Adhesive - Spray Adjustment

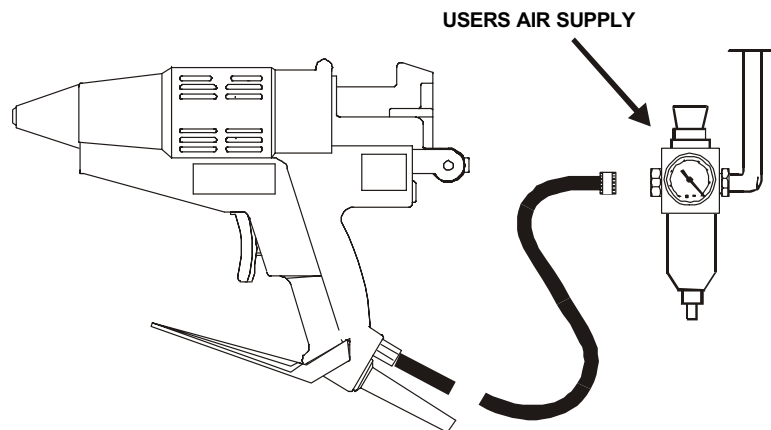
Turn the spray air adjustment control completely clockwise. Holding the applicator facing away from you, squeezing the trigger will extrude a bead of adhesive from the nozzle. While continuing to squeeze the trigger, rotate the spray air adjustment control slowly counter-clockwise; this changes the adhesive bead into an ever-finer spiral spray pattern. Continue to adjust the control until a suitable spray pattern is obtained to suit your application. To stop the adhesive flow simply release the trigger.

5.2. Adhesive Flow Rate Adjustment

The flow rate of adhesive is dependent on the air pressure to the piston, and this is adjusted by varying the setting of the pressure regulator on the air supply to the applicator.

The air pressure operating range for the applicator is:

Minimum	45 p.s.i. (3 bar)
Maximum	100 p.s.i. (7 bar)



6. Application Hints

As with all adhesives, performance depends on conditions of use. Suggestions or recommendations contained herein are for guidance only, since actual conditions of use are outside the supplier's control.

- Ensure that the surfaces to be bonded are dry, free from dust, grease, and loose particles.
- Apply adhesive to one surface only. Bring the two surfaces together as quickly as possible; the faster the bond is made, the greater the strength.
- A heavier spray pattern increases both working time and bond strength.
- When gluing dissimilar materials, apply the adhesive to the least heat conductive of the two.
- On materials that are cold to the touch, a better bond can be made by pre-warming them before applying adhesive.
- Surplus adhesive can be trimmed using a sharp knife once it has cooled. Should molten adhesive drip onto a smooth or polished surface, allow it to cool completely before removal.
- Spray adhesives can be applied directly to expanded polystyrene and other plastic foams.
- Use only genuine Loctite® Hysol® adhesives to ensure reliable performance. Loctite® Hysol® adhesives are non-toxic and non-flammable.

7. Troubleshooting



Before proceeding with any repair or maintenance operation disconnect the tool from the mains electricity supply.

Glue "Backup" and "Meltdown"

"Backup" occurs when hot molten adhesive in the glue chamber is forced back between the barrel wall and the outside surface of the adhesive cartridge and piston. Once this adhesive cools, it may lock the adhesive cartridge in the barrel, preventing, or at least restricting, normal extrusion. By far the most likely cause of backup is allowing insufficient warm-up time before operating the tool (the molten glue in the glue chamber cannot escape forwards because the nozzle is blocked, due to being insufficiently warm). In the vast majority of cases the backup self-clears once the tool, having fully reached operating temperature, is operated again. For the rare occasions where the backup does not self-clear, turn the spray air adjuster fully clockwise; this will switch off the spray air, allowing the full pneumatic line pressure to be applied to the piston (the tool will operate as a bead tool).

"Meltdown" occurs when the rear of the adhesive cartridge softens to the extent that it is not rigid enough to drive the cartridge forward without collapsing. As with backup, the molten adhesive can solidify, potentially locking the cartridge and / or piston into the barrel. Meltdown is caused by leaving the tool switched on for extended periods of time without operating it. It is recommended that, if the tool is to be left standing for forty minutes or more, it should be switched off and only switched back on when preparing to use it again.



The Loctite® Hysol® 175-SPRAY and 175-SPRAY-HT tools are fitted with specially coated pistons which have non-stick characteristics far superior to any PTFE coating; this minimises the effect of any backup or meltdown, should it occur.

FOR ANY REPAIRS OR ADJUSTMENTS – OTHER THAN THOSE DETAILED IN THIS MANUAL – PLEASE CONTACT 1-800-LOCTITE.

8. Care and Maintenance



Every attempt has been made to make this exceptionally powerful tool both reliable and trouble-free. However the following precautions should be noted:

- Make sure that the applicator is up to temperature before attempting to operate.
- Do not leave the applicator switched on for long periods without use. If the applicator is not to be used for forty minutes or more, switch it off and restart when required.
- Keep the applicator upright when not in use, never lay it on its side. Always use the stand provided, or the optional bench stand or suspension unit (see Spares and Accessory lists at the end of this manual).
- Do not use excessive force on the trigger. Ensure that the tool has fully warmed up before use.
- Keep the nozzle clean to prevent adhesive build-up. This is easily done by wiping the nozzle with clean paper or cloth while the nozzle is still warm.

9. Accessories and Spare Parts

Spare Parts	Part Number
Complete Nozzle Assembly – Wide Angle 2mm (fitted as standard)	985122
Applicator Stand	985069
Barrel PTFE	985071
Barrel Support Assembly	985091
Piston Support Assembly	985093
Piston	985095
Thermostat Assembly, 180°C	985123
Thermostat Assembly, 195°C (for polyamides)	985079
Heater Assembly 120 Volts	985080
PCB Assembly	985083
Thermal Fuse, Spacer Assembly	985076
Valve Body Airline Adapter	985240
Heater Housing Kit For 98037 (EVA Adhesive)	985232
Qty 1 – O-ring Heater Housing, item 5	
Qty 1 – Heater Housing, item 6	
Qty 1 – Fitting, item 30	
Qty 1 – Ground Screw, item 38	
Qty 1 - Lock Washer, item 42	
Heater Housing Kit For 98041 (Polyamides Adhesives)	985239
Qty 1 – O-ring Heater Housing, item 46	
Qty 1 – Heater Housing, item 47	
Qty 1 – Fitting, item 30	
Qty 1 – Ground Screw, item 38	
Qty 1 - Lock Washer, item 42	
Handle Kit	985228
Qty 2 – Moulded handles, item 1	
Qty 6 – Casing Screws, item 37	
Piston Support Hardware Kit	985229
Qty 1 – Washer, special with 4 holes, item 33	

Qty 1 – Pivot o-ring, item 28
Qty 1 - Washer, flat nylon, item 43
Qty 6 – Casing screws, item 37

Trigger Valve Kit	985233
Qty 1 – Urethane Hose, item 19	
Qty 1 – Urethane Hose, item 20	
Qty 1 - Trigger Valve Assembly, item 14	
Qty 1 – Philips Pan Head Screw, item 16	
Piston Support O-ring Kit, Qty 5	985234
Nozzle Shroud Kit, Qty 5	985235
Spray Air System Assembly Kit	985236
Qty 1 - Spray Air System Assembly, item 22	
Qty 1 – Urethane Hose, item 20	
Qty 1 – Urethane Hose, item 19	
Qty 1 – PTFE Hose, item 21	
U.S. Cord Set Assembly	985231
Qty 1 – Cordset, item 17	
Qty 1 – Clamp, item 18	
Qty 2 – Screws, item 41	

Accessories	Part Number
Complete Nozzle Assembly	
Ultra Wide Spray Pattern, 2mm Orifice	985216
Wide Spray Nozzle Assembly	985122
Narrow Spray Pattern Assembly	985211
(For spray pattern definition see Section 3 – Technical Data)	
Heavy-Duty Free-Standing Metal Stand	985087
Tool Hanger/Balancer	985243

10. Warranty

This applicator is guaranteed against faulty workmanship, materials and malfunction for a period of **12 months** from the date of purchase. This guarantee does not apply:

1. If the applicator has been dropped, damaged due to careless handling or has not been used in accordance with the manufacturer's instructions.
2. If the applicator has been modified in any way.
3. If the applicator has been opened or the electrical cable has been damaged or replaced.
4. If adhesive other than formulations supplied by the manufacturer of the applicator have been used.

The manufacturer undertakes to repair or replace at their discretion. The tool will be returned to the distributor or user freight paid.

Seller and Manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage direct or consequential, arising out of the use, or the inability to use, the product. User shall determine the suitability of the product for his intended use and the user assumes all risks and liability whatsoever in connection therewith.

11. Appendix.

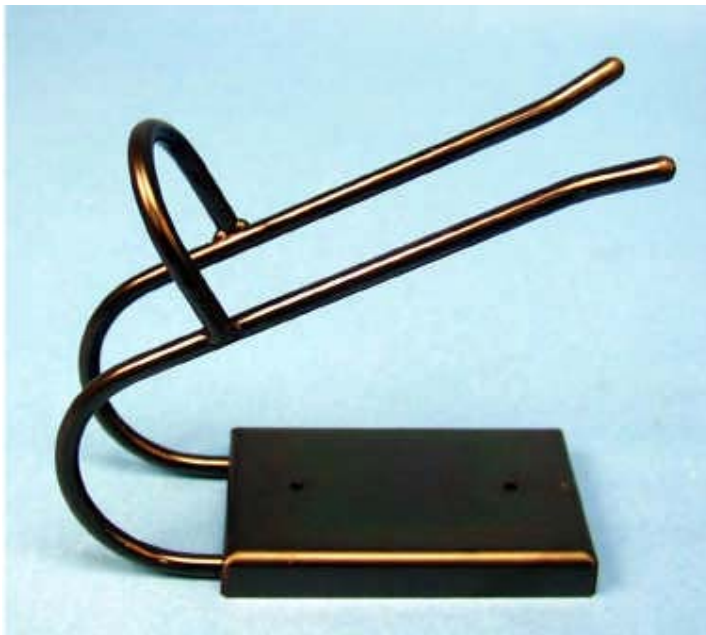
Pictures of available nozzles/accessories.



985211
NARROW SPRAY
NOZZLE ASSEMBLY

985122
WIDE SPRAY
NOZZLE ASSEMBLY

985216
ULTRA WIDE SPRAY
NOZZLE ASSEMBLY



985087
HEAVY DUTY FREE-STANDING
METAL STAND



985243
TOOL HANGER / BALANCER

Exploded view diagram of a mechanical assembly, likely a pump or sprayer, showing various components and their assembly points. The diagram includes numbered callouts (1 through 48) and specific part numbers (FOR 98041, FOR 98037) for certain components.

Key components and callouts include:

- 1: Main body/handle assembly
- 2: Trigger gun
- 3: Pump mechanism
- 4: Trigger gun handle
- 5: Trigger gun handle (FOR 98037)
- 6: Trigger gun handle (FOR 98041)
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- 48: Trigger gun handle (FOR 98041)

13. Parts List.

48	1	THERMOSTAT ASSEMBLY, 195°C, 383°F		985079
47	1	HEATER HOUSING ASSEMBLY	HEATER HOUSING KIT	985239
46	1	HEATER HOUSING O-RING	HEATER HOUSING KIT	985239
45	1	HELICAL SPRING LOCK WASHER, 1/4", BLACK OXIDE		
44	2	WASHER, 1/4", FLAT, BRIGHT ZINC PLATE		
43	1	WASHER, FLAT, NYLON	PISTON SUPPORT HARDWARE KIT	985229
42	2	HELICAL SPRING LOCK WASHER	HEATER HOUSING KIT	985232
41	2	PHILLIPS PAN HEAD SCREW, SELF TAPPING, #6-20 X 3/8, BRIGHT ZINC	US CORDSET ASSEMBLY KIT	985231
40	3	PHILLIPS ROUND HEAD SCREW, #6-32 x 1/4 LONG		
39	4	PHILLIPS ROUND HEAD SCREW, #10-32 x 5/8 LONG, BLACK OXIDE		
38	1	EARTH (GROUND) SCREW, 4BA x 1/2" LONG	HEATER HOUSING KIT	985232
37	6	CASING SCREW, 12mm LONG SELF-TAPPER	AVAILABLE IN MULTIPLE KITS	985288 or 985229
36	1	PHILLIPS PAN HEAD SCREW, SELF TAPPING, #6-20 X 3/4, BRIGHT ZINC	TRIGGER VALVE KIT	985233
35	1	PHILLIPS PAN HEAD SCREW, 1/4-20 x 1/2 LONG, BLACK OXIDE		
34	1	SOCKET HEAD SHOULDER SCREW, 1/4" x 1"		
33	1	WASHER, SPECIAL WITH 4 HOLES	PISTON SUPPORT HARDWARE KIT	985229
32	1	BARREL SUPPORT EARTH WIRE ASSEMBLY		
31	1	HEATER HOUSING EARTH WIRE ASSEMBLY		
30	1	FITTING, BARBED	HEATER HOUSING KIT	985232
29	1	RED LENS		
28	1	PIVOT O-RING		
27	1	PISTON		985095
26	1	PISTON SUPPORT O-RING		985234
25	1	PISTON SUPPORT ASSEMBLY		985093
24	1	PISTON PLATE		
23	1	BARREL SUPPORT		985091
22	1	SPRAY AIR SYSTEM ASSEMBLY	SPRAY AIR SYSTEM KIT	985236
21	1	PTFE TUBING, 195mm LONG		
20	1	URETHANE TUBING, 50mm LONG	AVAILABLE IN MULTIPLE KITS	985236 or 985233
19	1	URETHANE TUBING, 75mm LONG		
18	1	CORDSET CLAMP	US CORDSET ASSEMBLY KIT	985231
17	1	U.S. CORDSET ASSEMBLY, 3M	US CORDSET ASSEMBLY KIT	985231
16	1	AIRLINE ASSEMBLY, 3M		
15	1	CONNECTOR & LIGHT PCB ASSEMBLY, 120 VOLT		985083
14	1	TRIGGER VALVE ASSEMBLY	TRIGGER VALVE KIT	985233
13	1	TRIGGER		
12	1	DISPENSER STAND		985069
11	2	HEATER ASSEMBLY, 120 VOLT, 250 WATT		985078
10	1	THERMOSTAT ASSEMBLY, 180°C, 356°F		985123
9	1	WIDE SPRAY NOZZLE ASSEMBLY, 2mm		985122
8	1	NOZZLE SHROUD	NOZZLE SHROUD KIT	985235
7	1	THERMAL FUSE & SPACER ASSEMBLY		985076
6	1	HEATER HOUSING ASSEMBLY	HEATER HOUSING KIT	985232
5	1	HEATER HOUSING O-RING	HEATER HOUSING KIT	985232
4	1	LOCK RING, ALUMINIUM		
3	2	BARREL SUPPORT RING		
2	1	BARREL, PTFE		985071
1	1	HANDLES, PAIR	HANDLE KIT	985224
ITEM	QTY.	DESCRIPTION	REBUILD KITS	AVAILABLE PART NO.
PARTS LIST				